

**LEGISLATIVE EDUCATION STUDY COMMITTEE  
BILL ANALYSIS**

**Bill No:** HB 726

**49th Legislature, 1st Session, 2009**

**Short Title:** Science & Technology Program Operations

**Sponsor(s):** Representative John A. Heaton

**Analyst:** Dorinda Fox

**Date:** February 25, 2009

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**Bill Summary:**

HB 726 appropriates funds to the Board of Regents of New Mexico State University (NMSU) for FY 10 to provide instructors, transportation, and equipment for a science, technology, engineering and mathematics (STEM) summer program.

**Fiscal Impact:**

\$85,000 is appropriated from the General Fund to the Board of Regent of NMSU.

Any unexpended or unencumbered funds will revert to the General Fund.

**Fiscal Issues:**

The Higher Education Department (HED) indicates that this request was not submitted to the HED for review and is not included in the department's funding recommendation for FY 10.

According to the Fiscal Impact Report, the Legislative Finance Committee has concerns about the growth of research and public service projects within the higher education budget, as well as the alignment of these projects with state goals and strategic plans. The committee also continues to have significant concerns about accountability and performance outcomes for these projects.

**Issues:**

According to HED's analysis, HB 726 is a response to the high percentage of high school students needing remedial coursework upon entering NMSU.

NMSU states that New Mexico needs to improve K-12 education and student retention in order to ensure a continuing pipeline for future leaders in the technical, science, and engineering areas. Additionally due to various emerging environmental regulations, rural communities throughout New Mexico need to receive ongoing training, education and outreach on the potential impact of the new regulations on their community. This bill would provide funds to initiate the expansion of this statewide PREP K-12 program for middle and high school students, as well as rural communities throughout the state starting with Carlsbad, Artesia, Lake Arthur, Hagerman, Loving and Dexter. The PREP program would be delivered by the NMSU College of Engineering.

According to NMSU, PREP recruits high-achieving pre-college students for a six-week academically intense, high school credit awarding, summer program. PREP offers the participants special courses in logic, algebraic structures, physics and technical writing. Problem solving seminars equip them with the necessary tools to complete pre-calculus/calculus in high school. Through field trips and career awareness seminars, students meet professionals who instill the fortitude to become the scientific leaders of tomorrow. Over the past decade, over 800 middle school and high school students from Hatch, Las Cruces, and Gadsden have successfully completed some level of PREP. Of those that are eligible to graduate from high school that completed the survey, 201 of the students are currently in college and 100 percent of the students that finished PREP are high school graduates. Ninety percent of those in college are enrolled at NMSU. NMSU is requesting state funding to continue this program in future years; expand access to the program to additional students; and include program delivery in Carlsbad, Artesia, Lake Arthur, Hagerman, Loving, and Dexter. NMSU envisions developing PREP into a fully statewide program in future years.

The Public Education Department (PED) analysis reports that:

- HB 726 would contribute to the performance measure of the percentage of middle school students who achieve a level of proficient or above on the New Mexico Standards Based Assessment in math.
- The bill supports Goal 1 of PED's Strategic Action Plan for Advancing Math and Science Education in New Mexico 2007-2010.
- This bill supports recommendations in NM Project 2012 which focus on using problem-solving, inquiry-based curricula.

**Background:**

In an effort to determine if and to what extent public postsecondary institutions and local public school districts communicate and coordinate their efforts to prepare students for college-level coursework and the workforce, throughout the 2008 interim the Legislative Education Study Committee (LESC) heard testimony and engaged in discussions with representatives of all of New Mexico's 28 state and tribal two- and four-year institutions of higher education. In addition to dual credit programs, NMSU representatives outlined the following initiatives aimed at secondary student college preparation and career success to LESC at its October 2008 meeting:

- The NMSU main campus reported involvement in over 70 NMSU-sponsored youth development and educational programs serving K-12 students and teachers throughout the state, including:
  - the Science, Engineering, Mathematics, and Aerospace Academy program for high school students;
  - Mathematically Connected Communities partnerships with school districts;
  - Project Lead the Way to help students succeed in engineering; and
  - Early childhood and Scientifically Connected Communities professional development programs for teachers.
- NMSU-Doña Ana reported that the community college is in the final year of a four-year Achieving the Dream grant focused on increasing college-entry mathematics preparedness for high school graduates and GED students.

According to PED, NMSU has been actively involved in efforts to improve STEM education. The institution has received federal and state funds for various STEM teacher professional development and student enrichment programs. A member of the NMSU Department of Mathematical Sciences serves on the state Math and Science Advisory Council and one of their College of Education faculty members is an alternate to that council.

**Related Bills:**

HB 69 *NMSU Pre-Freshman Engineering Program*

HB 134 *NMSU Science, Math & Aerospace Program*